



Wood supply at the edge of the world the Norse Greenland case study

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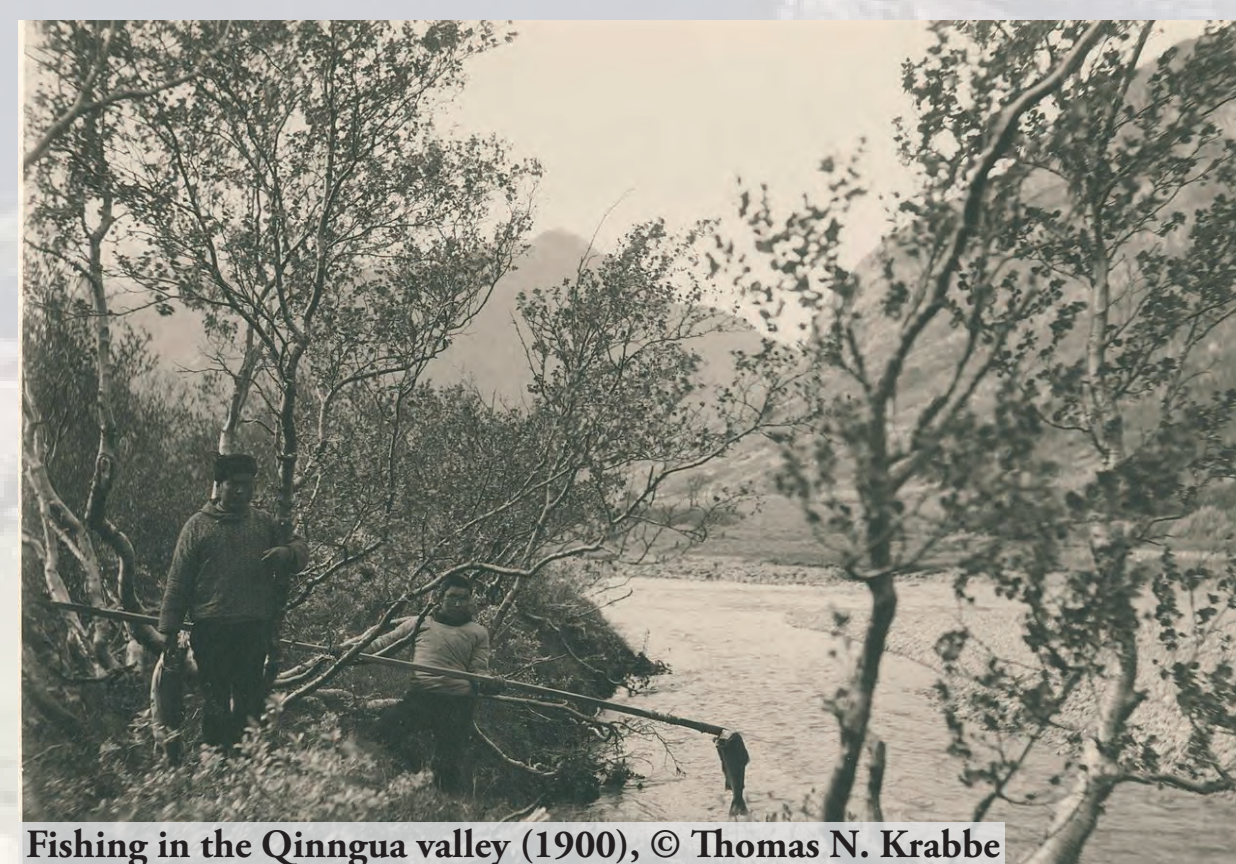
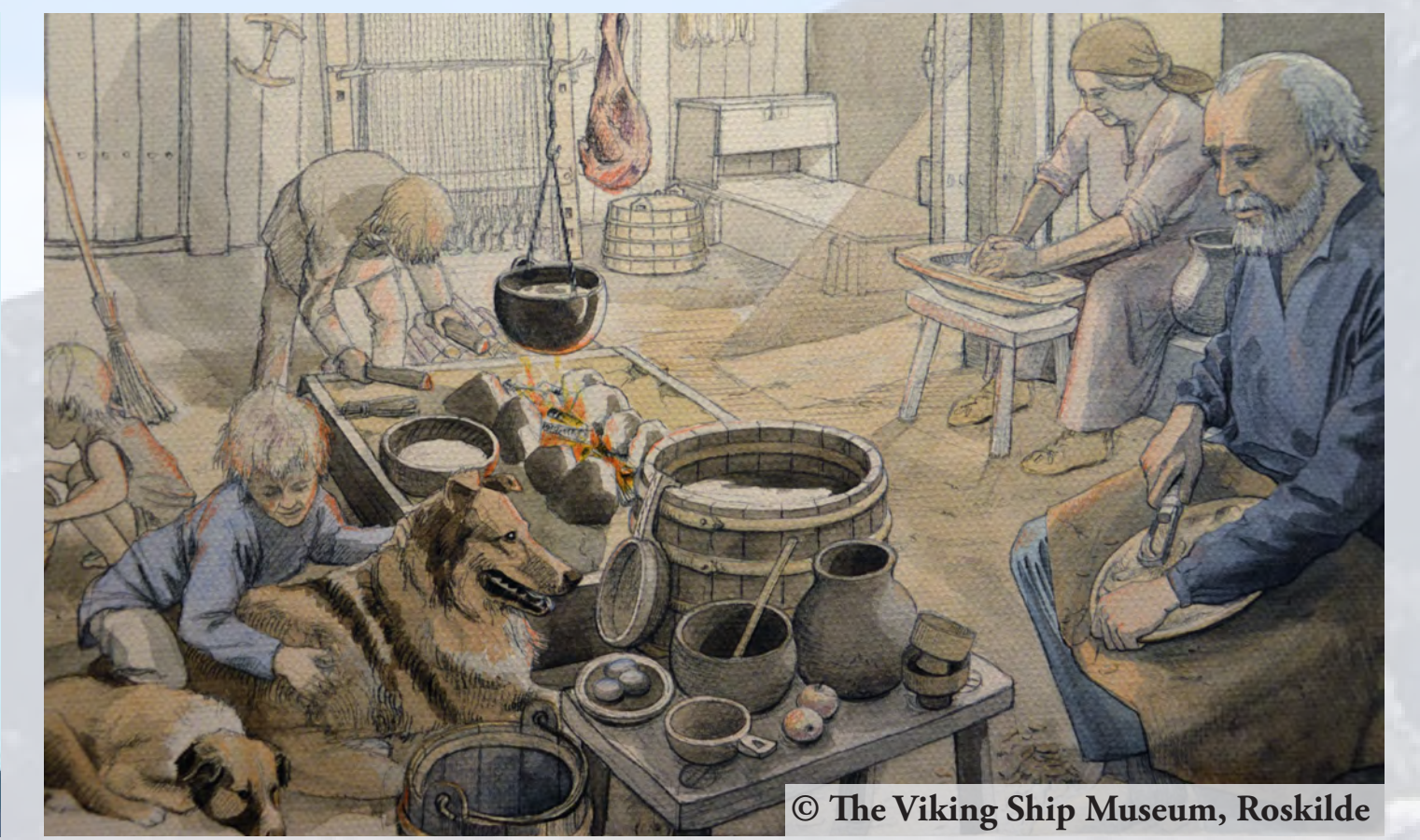
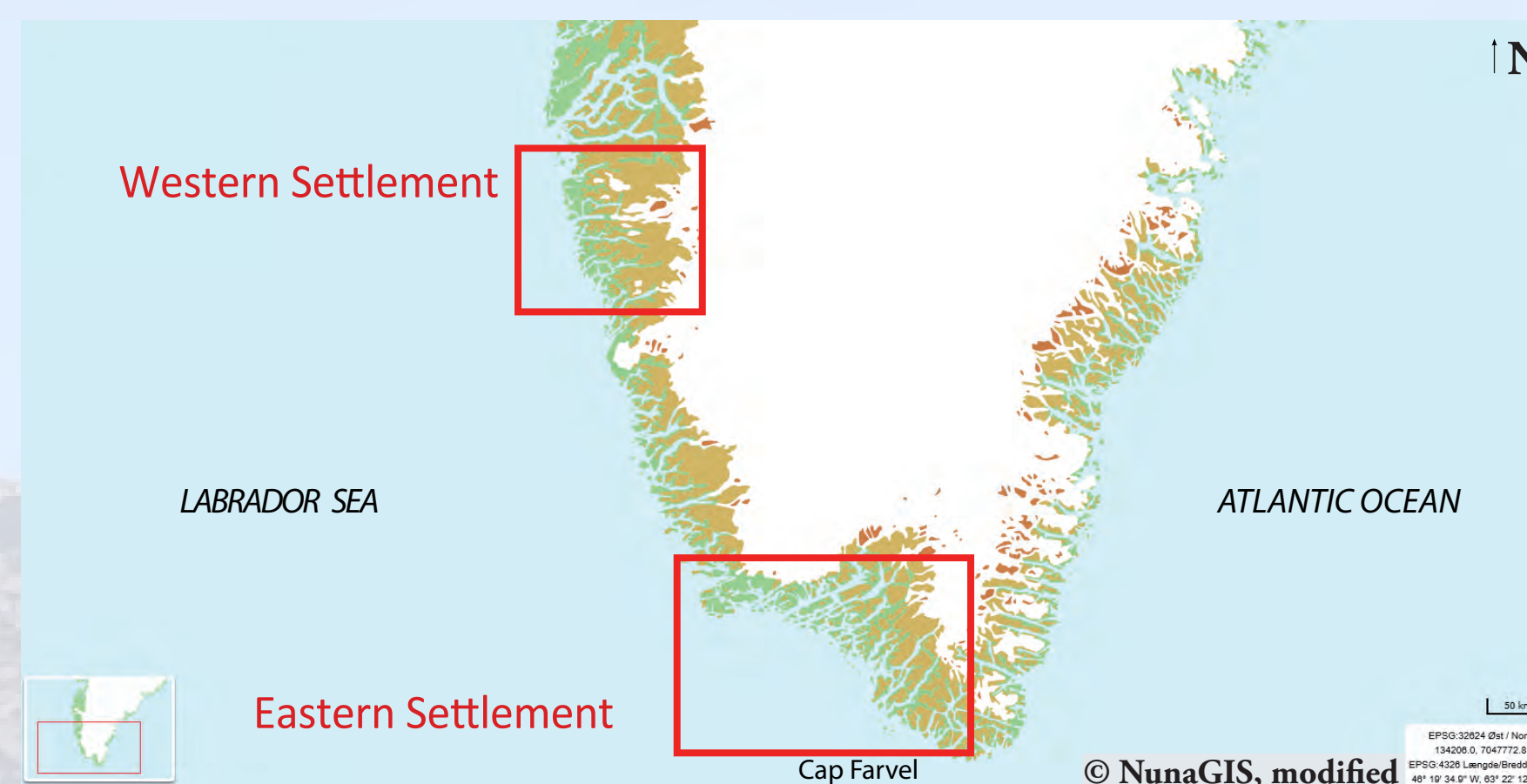
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Settling on the edge : the North Atlantic Saga

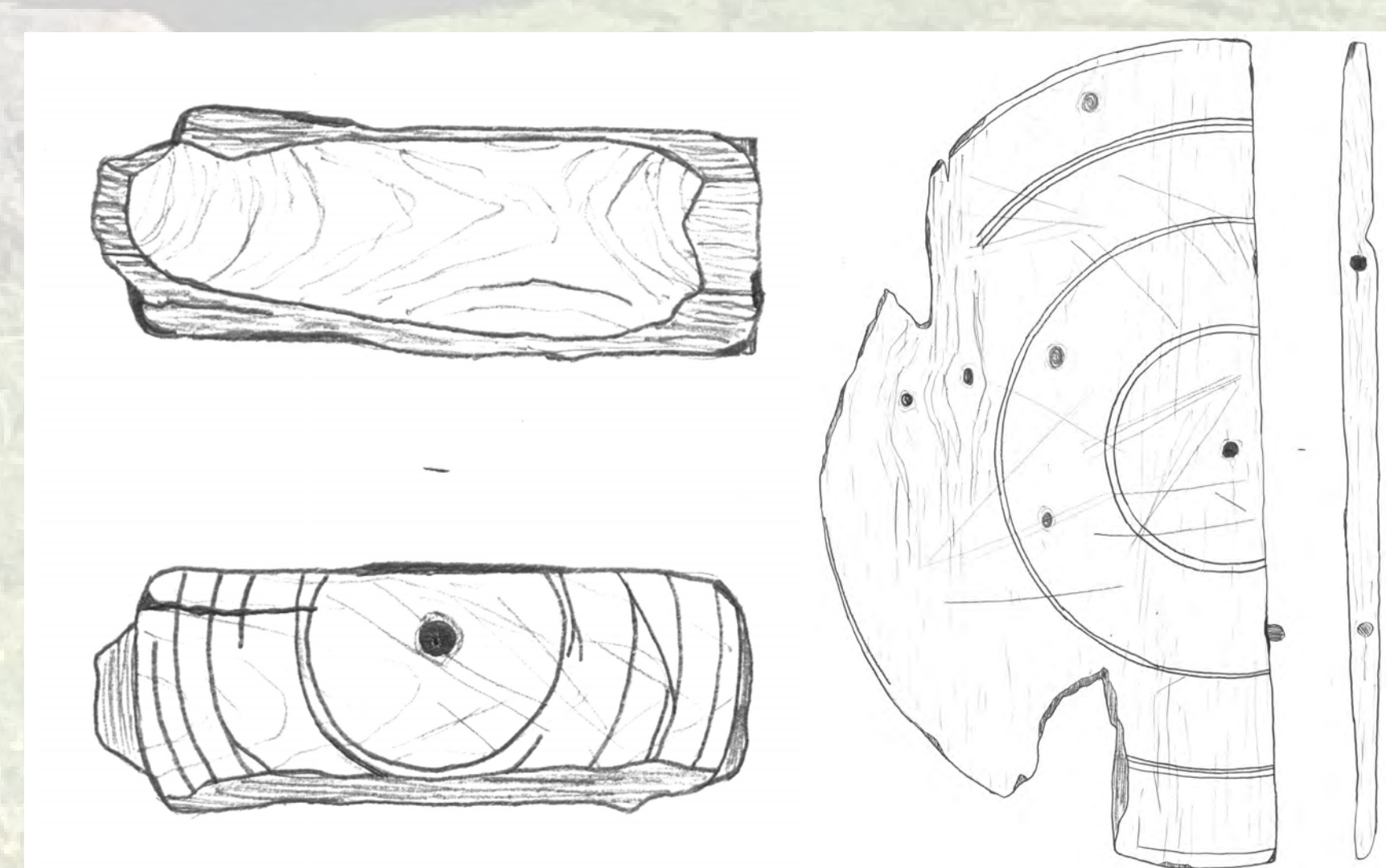
Starting around the second half of the 9th century, the Norse colonized Iceland and reached **Greenland in A.D. 985 or 986**, settling in two main areas known as **the Eastern and the Western Settlements**. For about five centuries, Norse society flourished in Greenland dotting the landscape with more than 600 sites, most of them located in the Eastern Settlement. The Norse settled in farms, composed of dwellings and living places as well as barns and stables, used for the production of dairy products, workshops or storage areas (e.g., Arneborg 2003; Arneborg *et al.* 2012).

Living in a sub-Arctic environment, Norse Greenlanders had a rather limited choice of wooden materials to use, with only **a few tree and shrub species found in South Greenland as well as driftwood along the coast**. Nevertheless, when preservation conditions are good, archaeological sites often yield **numerous wooden artefacts, from small everyday life items to building materials**. **Woodchips and twigs** recovered during excavations also tend to show that wood was worked in-situ and even used as a fuel material.



Very few studies have been conducted on wooden artefacts from the Greenlandic Norse settlements. Andersen and Malmros (1993) identified **larch** (*Larix* sp.) and **spruce** (*Picea* sp.) from boat parts. Scattered data can also be found in reports that mention **willow** (*Salix* sp.), **birch** (*Betula* sp.), **juniper** (*Juniperus* sp.), and **oak** (*Quercus* sp.) (e.g., Roussel 1936, Vebæk 1992). More recently, several studies have focused on the reconstruction of past landscapes in South Greenland and how natural resources were used by the Norse (e.g., Schofield and Edwards 2011; Ledger *et al.* 2014a).

Cultural dynamics or adaptive strategies: the management of wood resources in Norse Greenland



The present study involves the stave-built and carved vessels from two middle-sized farms, in part contemporaneous (from the 11th until around the mid-14th century) : ***E171 Tassilikuloq* in the Eastern Settlement** and ***The Farm Beneath the Sand* in the Western Settlement**.

- > Driftwood was the main source of timber in both settlements
- > Local Greenlandic species were utilized more in the Eastern Settlement than in the Western Settlement
- > Wood species from Europe such as oak are absent, contrasting with other Norse settlements in Iceland (Mooney 2016b) or the Faroe Islands (Malmros 1994)
- > Across the North Atlantic, Norse Greenland demonstrates «adaptive strategies» in terms of managing wooden resources
- > Across Greenland, the Eastern and the Western Settlement also demonstrate a notable difference in term of wood use

Limitations and future directions

Since it is not always possible to identify wood down to the species level, assigning provenance to wooden materials can not be done using wood anatomy alone. Dendrological studies, chemical and genetic analyses could help to differentiate driftwood from terrestrial wood sources that may have been imported from Europe or the North American coast. Future investigations aimed at identifying timber sources will provide a clearer understanding of wood management strategies and human-environment interactions in the Norse Greenland Settlements and broadly across the North Atlantic.

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